

RECANALIZATION OF OCCLUDED VESSEL USING MAGNETIC RESONANCE GUIDANCE

ABSTRACT OF THE DISCLOSURE

5 A method and apparatus for recanalizing a substantially totally
occluded vessel in a subject. An image of the substantially totally
occluded vessel is obtained using magnetic resonance. A recanalization
device is guided using the obtained image. The occlusion is recanalized
with the recanalization device. In one embodiment, a magnetic
10 resonance signal is received with at least one external antenna located
external to the body of the subject. A map image of the occluded vessel
is generated using the signal received by the external antenna. A
magnetic resonance signal is received with an internal antenna
positioned within the body of the subject, proximate to the occluded
15 vessel. The map image of the occluded vessel is locally enhanced using
the signal received by the internal antenna.